

"HOT TOPIC" FLORIDA PHOSPHATE & CORONET INDUSTRIES SITE WEST CENTRAL & PLANT CITY, FLORIDA

West-Central Florida is the location of the largest phosphate related industry in the United States. Phosphate ore is mined and processed at numerous mines spread over Polk, Hillsborough, Manatee, Sarasota, DeSoto, and Hardee Counties. Most of the phosphate ore is used to produce agricultural related products, but is also used in the production of many other consumer products. Mining began in the late 19th century in Polk County, and continues to progress southwards.

Because of the thousands of acres these mines comprise, the potential exists for a variety of environmental impacts. The Superfund Division has 21 phosphate mine related sites in its site tracking database, CERCLIS. Many of these sites were entered into the database in 1980, with subsequent Preliminary Assessments and Site Inspections. In 1998, GAO conducted a review of the backlog of sites in CERCLIS, which highlighted the lack of progress at hazardous waste sites with "unaddressed risks".

In response to this review, the Superfund Division discovered a large backlog of phosphate mining related sites. Due to the large number of sites, the shared characteristics and potential environmental threats, the Division initiated a collective review of these sites, potential threats, investigative and remedial approaches. Although there are numerous environmental issues associated with the phosphate mining industry, the Superfund Division's "Florida Phosphate Mining" initiative has focused on characterization, assessment, and mitigation of risks associated with hazardous substances that may have been released during the mining and processing of the ore at the former mines.

Concurrent with this initiative, EPA HQ began a national review of mineral processing sites to assess, impart, whether or not mining exemptions were being properly applied. The Region 4 RCRA Division reviewed five of the phosphate mining sites maintained in CERCLIS. RCRA Facility Inspections and Site Inspections were conducted on these sites. One of the sites, the Cornet Industries Site (Coronet) was identified by EPA and the State of Florida has having significant contaminant and storm water management issues that warranted immediate action. In addition, contamination of nearby private wells raised significant concern in the community. Both the State of Florida and EPA conducted significant site characterization efforts and implemented emergency response actions to mitigate immediate threats.

The Coronet Industries Site is the former location of an agricultural feed production complex that

was originally part of a larger mining operation. The Site is located on a 980-acre parcel of land that was part of a 2500-acre original mine parcel. Coronet purchased the 980-acre parcel in 1993 and produced phosphate based animal feed supplements for poultry, cattle, and swine until the company closed in 2004. The process mainly primarily involved the defluorination of the phosphate. Phosphate mining operations was conducted on the original parcel from the early 1900's until the mid-1940's.

The Coronet Industries Site is comprised of a plant facility and 10 ponds that were used for waste water treatment and storm water management. The ponds cover approximately 300 acres and discharge to the groundwater and two nearby streams. Over the past several years, the State of Florida and RCRA Division have implemented numerous measures to address immediate threats to human health and the environment and conduct an assessment of the nature and extent of contamination.

Pursuant to State Administrative Orders, down gradient homeowners with contaminated private wells have been provided with public water; contaminated ponds have been drained; and construction is underway to close one of the larger ponds, Pond 6. Pond 6 is approximately 60 acres in size and was used as a primary treatment pond. Prior to its draining, it posed a significant threat of overtopping and flooding nearby residential areas. In addition to work lead by the State, the RCRA Division has conducted extensive characterization of the nature and extent of contamination at the facility, the ponds, nearby streams, and underlying groundwater.

In effort to involve other potentially liable parties in the cleanup, response actions at the site have transitioned to the Superfund Division. The site is eligible for inclusion on the NPL, however, due to significant cooperation and financial contributions by Coronet thus far, placement of the site on the NPL is not anticipated. The Superfund Division anticipates to begin formal negotiations with Coronet in February 2007 to conduct an RI/FS and Risk Assessment. Its anticipated that much of the work conducted under the RCRA Order will fulfill the requirements of the RI. A ROD is expected to be issued in 2008 that will identify the actions needed complete the overall site cleanup.